

Chapter 5

5. CONCLUSION & RECOMMENDATION :-

5.1 CONCLUSION:-

A municipality applying this best practice will benefit through reduced water loss and reduced costs to the utility. The importance of prioritizing active leak control practices and procedures in the identification of water loss and the corresponding strategies to reduce leakage cannot be understated. The municipality will also benefit through the extension of sustainable water supplies, reduced operating costs, improved system hydraulics and utility efficiency, and improved environmental stewardship. This methodology will also allow more rational performance measures to be calculated for sub-systems, systems and utilities for realistic national and international performance comparisons of water loss management.

Water is one of the most important basic needs for all living beings. However, unfortunately a huge amount of water is being wasted by uncontrolled use. Some other automated water pressure monitoring system is also offered so far but most of the method has some shortness in practice. Try to overcome these problems and implemented an efficient automated water losses monitoring and controlling system. Our intension of this research work was to establish a flexible, economical and easy configurable system, which can solve our water-losing problem. Had been used a low cost **atemga32** microcontroller and **MPX4115A** pressure sensor in this system which is the key point to reduce cost. For successfully simulation the system in lab and therefore proposed a water losses monitoring and controlling network which flexibility would offer

us to control this system from any place via wireless even with different type of devices. This could have a substantial benefit from this research work for efficient management of water losses.

The measurement of water losses should play a measure of 0 to 100 kpa, but the system developed is possible to measure up to 115 kpa. Another part of The static pressure of water is approximately one Kilopascal (kPa) per, so the pressure range is 0 to 115KPa, which corresponds to the range of the MPX4115A pressure sensor. Those have been obtained from the simulation system in chapter four.

Therefore controlling water losses or leak by mitigating used automatic control unite (microcontroller, pressure sensor) compare with manual control system used(Taco meter) or Pressure control valve(PCV). It is hoped that it will be a catalyst for increased and enhanced awareness and implementation of water loss solutions in the country.

5.2 RECOMMENDATION

- 1) In the circuit can be increase the numbers of sensors .
- 2) This circuit can be developing by using other device .
- 3) This circuit can be in hole of water distribution in country .
- 4) Also in circuit can use FSK module for send the data.
- 5) The range of pressure sensor can be increase by using other advance types of sensor.

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